



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 27 1978

OFFICE OF WATER AND  
HAZARDOUS MATERIALS

SUBJECT: Designation of the Aquifers Underlying Nassau  
and Suffolk Counties, New York - ACTION MEMORANDUM

FROM: Thomas C. Jorling, Assistant Administrator

Eckardt C. Beck, Regional Administrator  
Region II

TO: The Administrator

THRU: AX

1. GENERAL DESCRIPTION OF THE PROPOSED ACTION

a. Title and Statutory Basis: Title XIV, Public Health Service Act, as amended by the Safe Drinking Water Act, P.L. 93-523, Section 1424 (e) as follows:

(e) If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the Federal Register. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health, but a commitment may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer.

b. Problem Addressed: The Act states that the Administrator may determine that an area has an aquifer which is its sole or principal source of drinking water. A petition has been received from the Environmental Defense Fund (EDF) requesting a determination for Nassau and Suffolk Counties, Long Island, New York (Appendix A). The area is served by an interconnected system of four aquifers. These aquifers are the sole source of drinking water for Nassau and Suffolk Counties.

c. Recommended Course of Action: Designation of the area is recommended by publication of the attached Federal Register notice (Appendix B). It has been demonstrated in the background document (Appendix C) that the aquifers are the sole source of drinking water for over 1.5 million people in two counties.

## 2. MAJOR DECISION ISSUES

The basic issue is whether to designate Nassau and Suffolk Counties. After the area is designated, projects will be reviewed under the National Proposed Regulations for Sole or Principal Source Aquifer Areas published in the Federal Register on September 29, 1977.

ISSUE: Whether or not to designate Nassau and Suffolk Counties as having an aquifer system as its sole source of drinking water which, if contaminated, would create a significant hazard to public health.

Option A: Make the designation as requested by the petitioners.

Pro 1: The aquifer system is the sole source of drinking water for the bi-county area.

Pro 2: Alternative supplies, either from upstate New York or from desalinization, are not economically feasible at this time.

Pro 3: If the aquifer system were to become seriously contaminated, exposure of the persons served by the system would constitute a significant hazard to public health.

Pro 4: Once introduced to a ground-water supply, contaminants may have an extremely long residence time.

Con 1: Once designated, the area remains designated and there is no provision for delegation of project review to State or local agencies.

Con 2: Nassau-Suffolk Regional Planning Board has requested that the area not be designated; it believes the designation will constrain its planning options.

Option B: Do not designate the area at this time.

Pro 1: Designation is not necessary because the management policies which will come out of 208 and coastal zone management planning may be more effective in terms of ground-water protection and will not be limited to Federal financially assisted projects.

Pro 2: Designation may simply add another review process while dealing with a limited type of project (Federal financially assisted).

Con 1: The Nassau-Suffolk aquifer system does meet the requirements for designation.

Con 2: A decision not to designate would be difficult to sustain since there is no economically feasible alternative for drinking water in the bicounty area.

Con 3: The EPA would risk potential suit by the petitioners, who are known to be active in pursuit of legal remedies.

Recommendation: Designate Nassau and Suffolk Counties as stated in Option A.

### 3. PUBLIC PARTICIPATION

A notice of receipt of the petition, together with a request for comments, was published in the Federal Register on June 12, 1975. Written comments were submitted by the Environmental Defense Fund (EDF) on August 7, 1975, supporting their petition. A letter from the Director of the Nassau-Suffolk Regional Planning Board, dated October 1, 1976, requested that designation be delayed until after the completion of the areawide waste management (208) planning process for Long Island.

Because of the limited response to the Federal Register notice, EPA issued a press release and mailed an information sheet to elected officials and environmental groups on Long Island in March 1977. In addition, a presentation was made to the Citizens Advisory Committee (CAC) of the 208 planning agency and to the executive committee of the Long Island Water Conference. In response to these activities EPA received three comments: (1) a letter from EDF questioning why project review would exclude direct Federal projects, (2) a letter from a member of the East Hampton Planning Board expressing support for designation, and (3) a letter from the CAC requesting that designation be delayed until after the completion and approval of the Long Island plan.

In considering the comments received, we could not agree with the letters requesting further delay since we do not believe that the review process under Section 1424(e) will constrain the options of 208 planning. Therefore, it is our best judgment that the designation package should be signed by the Administrator at this time.

### 4. SUMMARY OF THE POSITIVE AND NEGATIVE EFFECTS OF THE RECOMMENDED ACTION

a. Cost and Economic Impacts: Increased emphasis on assessment of ground-water impacts of projects is expected to increase the cost of environmental analysis for projects reviewed under 1424(e). The project review program is sufficiently flexible to require extensive data collection and analysis only where necessary to protect public health. At present it is impossible to project such costs since the number of future projects is unknown.

b. Intermedia Effects: If EPA review of projects is to protect the aquifer system, it is possible that certain project discharges must be prevented from entering the aquifers. Treatment or removal of contaminants could result in an increased solid waste problem or discharge to surface waters away from the aquifer's recharge zone. In accordance with PL 92-500, such discharges to surface water would be handled through the NPDES program; ground-water discharges are not subject to the NPDES program.



c. Programmatic and Resource Consequences: We expect that review of most projects will be handled by the existing EIS review staff. A minimal increase in level of effort is expected. For projects reviewed upon petition, workload forecasts are impossible. It is likely, however, that we will be petitioned to review all EPA construction grant projects where an EIS is not prepared. These reviews can be handled by the present staff which already reviews grant applications for environmental impacts.

d. Energy Consequences: None are expected.

#### RECOMMENDATION

It is recommended that the Administrator sign the attached Federal Register Notice of Determination for Nassau and Suffolk Counties.

Approve: \_\_\_\_\_

Disapprove: \_\_\_\_\_

Date: \_\_\_\_\_

#### Concurrences

PM-224, Elston	Concur <u><i>DEH</i></u>	Nonconcur _____	Date <u><i>3/31/78</i></u>
A-130, Bernstein	Concur <u><i>Dan Bickel</i></u> <i>Acting General Counsel</i>	Nonconcur _____	Date <u><i>5/22/78</i></u>
RD-672, Gage	Concur _____	Nonconcur _____	Date _____
EN-229, Durning	Concur _____	Nonconcur _____	Date _____
A-101, Roush	Concur _____	Nonconcur _____	Date _____
A-102, Warren	Concur _____	Nonconcur _____	Date _____
A-104, Cook	Concur _____	Nonconcur _____	Date _____
AW-443, Hawkins	Concur _____	Nonconcur _____	Date _____

#### Attachments

Appendix A - Designation Petition

Appendix B - Federal Register Notice of Determination

Appendix C - Background Document